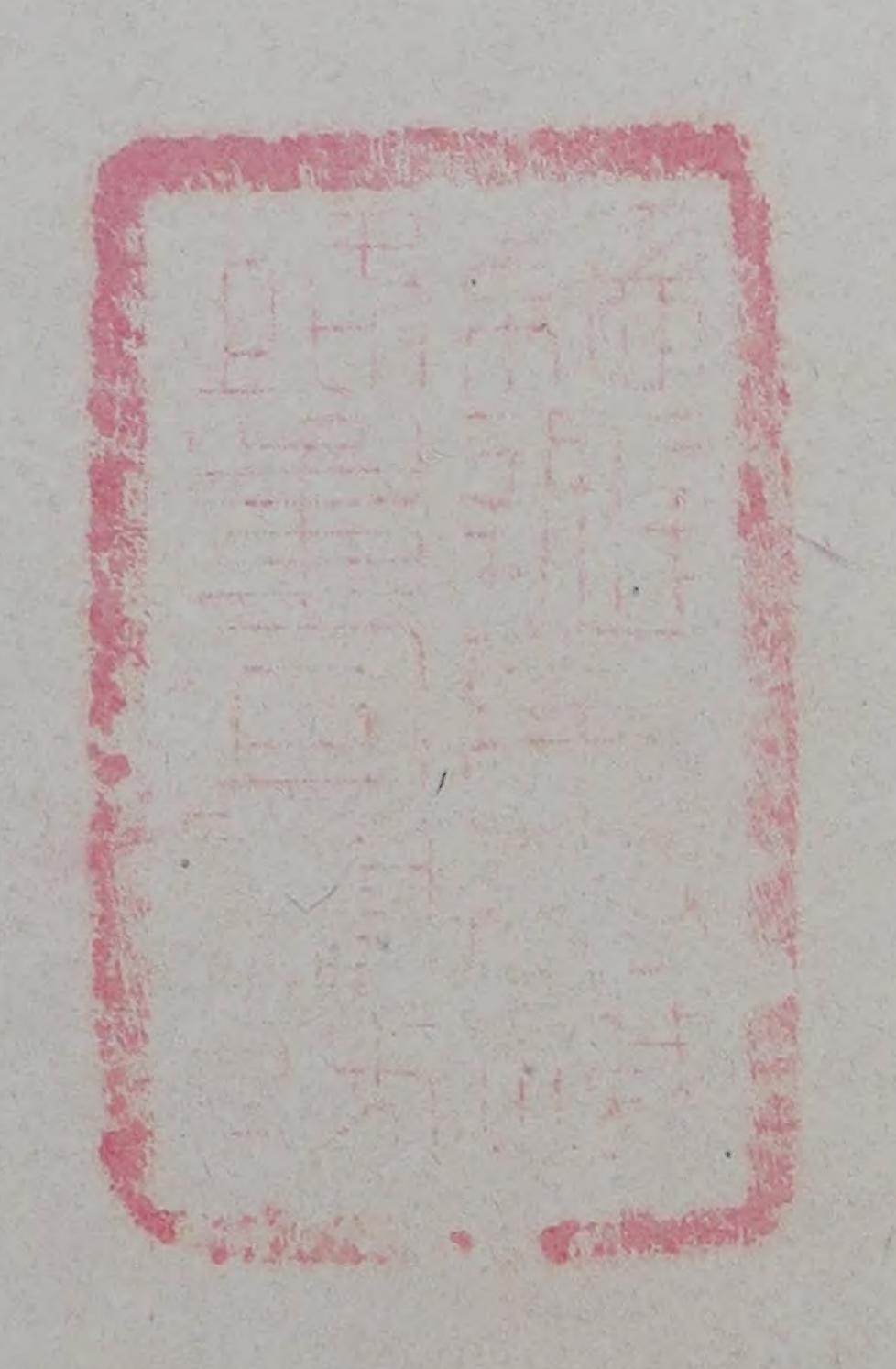
Imperial Railways of North China.

Report for the Fifteen Months ended 31st December 1909.

Published for circulation by order of the Directors.



Imperial Railways of North China.

GENERAL REPORT.

It will be observed that the period under review in this report extends from the 1st October, 1908, till the 31st December, 1909, a total of 15 months. This is due to the fact that, in order to ensure uniformity in the reports, accounts and statistics of all Government Railways in China and for the purposes of easy comparison, the Board of Posts and Communications have arranged that in future the financial year of all Government lines will be closed on one date. The date chosen is the 31st December.

During the autumn rains of 1909, the Liao River in the neighbourhood of Hsinminfu again overflowed its banks, and flooded the whole of the surrounding country. In consequence the line passing through that district was damaged in three places and traffic was suspended for nine days.

The trade of North China has, on the whole, been most satisfactory. In Manchuria, however, where formerly we had a large traffic in beans and beancake, now we have none. The South Manchuria Railway have captured the whole of the industry.

Results.—The results of working for the period abovementioned are as follows:-

| Earnings | | | . 1 | | | | | | | | \$ | 14,345,201.74 |
|----------|------|-----|-----|-----|------|----|---|-----|-----|----|----|---------------|
| Working | | | | | | | | | | | 22 | 4,554,013.32 |
| Ratio of | Work | ing | Ex | per | ises | to | E | arn | ing | rs | | 31% |

- Milage.—The total number of miles of main line open to traffic on 31st December, 1909, was 602.78 miles.
- Betterments—Improvements to the line and additions to the rolling stock have been made at the charge of Revenue to a total of \$1,011,371.33.
- Capital—In terms of the Hsinmintun—Mukden Railway Agreements, the South Manchuria Railway Company were entitled to contribute one half of the estimated cost of reconstructing the line east of the Liao River into Mukden. This contribution has now been received and amounts to Gold Yen 320.000.
- Loan of 1899—The amortisation of the Imperial Chinese Railways 5% Gold Loan of 1899 regularly continues. On 1st August, 1909, this loan was again reduced by £57,500, the amount of the Fifth Annual Drawing, and now stands at £2,012,500. The interest on the loan has been duly met to date.
- Exchange—The monthly remittances to London for repayment of Loan Capital and Loan Interest have been effected at the average rate of 2/5⁷/₁₆ per Tientsin Tael.
- Hsiling Railway.—This short line constructed by the Chinese Government out of its own funds, though a branch of the Peking-Hankow Railway, was, after construction in 1903, placed under the management of the I.R.N.C. As it has since been found that it could be worked and controlled more efficiently by the Peking-Hankow Railway as an integral part of their system, the management of the branch was handed over to that Administration on 1st January 1909.
- Engineer in Chief.—Mr Claude W. Kinder, C. M. G. who had been connected with the I. R. N. C. since the inception and who was the first Engineer-in-Chief, resigned his position in April, 1909, after a little over 30 years service. The Director General endeavoured to persuade Mr. Kinder to remain in the service, but he insisted on retiring. Finally the position of Consulting Engineer in London was offered to Mr. Kinder, but he would not accept it.

Mr. Bellingham was selected as successor to Mr. Kinder, and an agreement had been signed by him with the Director General, but he died before entering on his duties. His untimely death was a regrettable event to the administration. Since then the Directors have pleasure in reporting that an Agreement has been arrived at with Mr. D. Poyntz Ricketts appointing him to the vacancy.

Staff.—The Directors take this opportunity of thanking the Staff for the able and hearty services rendered by them.

Loo Etong, Managing Director. Luk Hsu Sheng, Director

IMPERIAL RAILWAYS OF NORTH CHINA.

STATEMENT OF ACCOUNTS

FOR THE FIFTEEN MONTHS ENDED 31st DECEMBER, 1909.

No. 1

Capital Authorised and Created.

| DETAILS | (); | apital Author | rised | | Capital Creat | Balance | | | |
|--|------------------|---------------|-----------------|---------------------|---------------|---------------|------------------------|-------|------|
| | Stock and Shares | Loans | Total | Stock and Shares | Loans | Total | Stock and Shares | Loans | Tota |
| mperial Chinese Govern- ment and Chinese Share- | S | S | S | S | S | S | Smres | \$ | |
| Inder Loan Agreement) | 21,994,428.57 | _ | 21,994,428.57 | 21,994,428.57 | - | 21,994,428.57 | | 9 | \$ |
| nder Japanese Loan Agreements, South Man- | | 27,600,000.00 | 27,600,000.00 | - | 27,600,000.00 | 27,600,000.00 | | | |
| Gold Yen 320,000. | | 377,142.86 | 377,142.86 | | 377,142.86 | 377,142.86 | | | - |
| \$ 2 | 21,994,428.57 | 27,977,142.86 | 49,971,571.43 2 | 1,994,428.57 | 27,977,142.86 | 49,971,571.43 | | | |

Stock and Share Capital Created Showing Proportion Issued. No. 2

| | Amount Created | Amount Issued | Amount Unissued |
|--|------------------|---------------------|-----------------|
| Imperial Chinese Government and Chinese Shareholders | \$ 21,994,428.57 | \$ 21,994,428.57 | \$ |
| \$ | 21,994,428.57 | 21,994,428.57 | |

No. 3

Capital Raised by Debenture Stock.

| Imperial Chinese 5% Railway Loan, 18 | | | | moun | | | | | | | \$ |
|---|--------|--------|------|--------|---|---|---|---|--|---------------------------------|----------------------------|
| Existing at 30th September, 1908. Bonds of Fifth Drawing poid of | * | ٠ | | * | • | ۰ | | | | £ 2,070,000. | 24,840,000.00 |
| Bonds of Fifth Drawing paid off. Existing at 31st December, 1000 | | | | | | | | | | 57,500. | 690,000.00 |
| B to old December, 1909 | × | | | - | * | - | ÷ | * | | £ 2,012,500. | 24,150,000.00 |
| Of which there was invested in the Hongke Less Withdrawals | one l | - Cha | | D 1 | * | | | | | £ 228,344.10.10 16,143. 5. 6 | 2,834,975.72 288,560.54 |
| Leaving invested in the Hongkon | | | | | | | | | | | 2,546,415.18 |
| South Manchuria Railway Loan, 1909, (Existing at 31st December, 1909. | origin | nal aı | noun | t of I | | | | | | | 377,142.86 |

Receipts and Expenditure on Capital Account. No. 4

Dr.

| | Total to 30th Sept. 1908 | Amount expended in period ending 31st Dec. 1909 | Total to 31st Dec. 1909 | | Total to 30th Sept. 1908 | During Period to 31st Dec. 1909 | Total to 31st Dec. 1909 |
|-------------------------|-----------------------------------|--|----------------------------------|---------------------------|-----------------------------------|--|----------------------------------|
| To Expenditure | \$ | S | S | By Receipts | \$ | S | \$ |
| Lines open for Traffic | 44,938,509.73 | - | 44,938,509.73 | Shares | 21,994,428.57 | - | 21,994,428.57 |
| Extension to Hsiku | 305,353.89 | 49.96 | 305,403.85 | Debenture Stock | 27,600,000.— | - | 27,600,000.— |
| Hsin-min-fu Mukden Line | 1,624,428.57 | 377,142.86 | 2,001,571.43 | South Manchuria Rly. Loan | - | 877,142.86 | 377,142,86 |
| \$ | 46,868,292.19 | 377,192.82 | 47,245,485.01 | | 1 | | |
| Balance | | | 2,726,086.42 | | | | |
| | | s | 49,971,571.43 | | | s | 49,971,571.43 |

No 5

Details of Expenditure on Capital Account.

| | | | | | | | | S |
|---|---|---|---|---|--|----|---|------------------|
| On Hsiku Extension | | | | * | | ik | * | 49:96 |
| On Hsin-min-fu Mukden Line — East of Lino River Section | • | • | ٠ | 0 | | 6 | ۰ | 377,142.86 |
| | | | | | | | | \$ 377,192.82 |

No. 6 Expenditure on Capital Works paid for from Revenue.

| т | ents to Lines, Inside and Outside | Wa | 11: | | | | | | | | | | | | S |
|----|-----------------------------------|------|-------|-------|-------|-------|-------|-------|-----|---|----|---|-----|---|--------------|
| 1 | Rolling Stock | | | ŵ | | | | | | | | | | | |
| 7 | Yards, Buildings and Track | | | | | 0 | • | ٠ | 0 | | 6 | * | | | 465,553.52 |
| r | Tongshan Engineering School. | | • | • | 6 | 0 | 6 | ٠ | | ٠ | 0. | * | • | | 142,484.93 |
| .1 | longshan Works | | | | | | | 9 | • | | • | ۰ | · · | | 38,987.13 |
| H | Isin-min-fu Mukden Line — East | of I | iao i | River | Sont: | | • | 0 | * | ٠ | • | | | | 119,425.44 |
| | | | | | | | | | | | × | | , | , | 244,920.31 |
| | | | Exp | ended | durin | ng Ci | urren | t Per | iod | 0 | | | | - | |
| | | | Exp | ended | in P | revio | us Y | ears | | | | 9 | * | 6 | 1,011,371.33 |
| | | | | | | | | | • | • | | 3 | | | 7,766,079.00 |
| | | | | | | | | | | | | | | S | 8,777,450.33 |

Revenue Account Dr. To Maintenance of Way, Works and Stations as per Abstract A . . . 1,071,912.65 Cr. By Earnings: Passengers . 6,043,572.71 46,920.27 Balance carried to Net Revenue Account 9,791,188.42 414,605.84 307,464.91 \$ 14,345,201.74 \$ 14,345,201.74

No. 8

| Net Revenue Acc | et | Revenue | Account |
|-----------------|----|---------|---------|
|-----------------|----|---------|---------|

| To Debenture Loan, Fifth instalment reparation of Shares, Interest Reconstruction of Boxer damage Paid to Imp. Chinese Government Hsiling Line, Working Mining Prospects Shipping Department Tongshan College, Upkeep Bonus to Employees Betterments being amount taken from for Capital Works Balance | 1,492,0 25,9 161,0 6,529,9 2,7 215,0 13,7 90,4 213,7 | 85.71 20.48 00.17 28.66 32.46 03.52 07.98 52.53 | Balance forward from last year. Balance transferred from Revenue Account. 9,791,188.4 |
|---|--|--|--|
| | \$ 16,087,40 | 4.08 | \$ 16,087,404.08 |

No. 9

General Balance Sheet

| Dr. | | Jaranoc Direct | - 20 |
|---|---------------|--|---------------------------|
| Capital Account, Balance per No. 4 Salaries and Wages due Sundry Creditors B. R. A. Balance taken over Net Revenue A/c. Balance at Credit per No. 8 | 205,812.01 | Loan Funds, on Deposit Receipt. £200,000. Loan Funds, on Current Account. 12,201.5.4 Revenue Funds, on Deposit Rect. £ 75,000. Revenue Funds, on Current Account "A" 27,222.4.11 To meet repayment of Loan Capital Cash with foreign Banks in China On Deposit Receipt \$ 1,495,714.29 On Current Account 1,628,186.26 Cash on hand in Head Office Stores Investments Traffic Accounts due to the Railway | ,226,666.95 278,021.10 |
| S | 12,169,676.06 | \$ 12 | 2,169,676.06 |

Wm. Henderson, C. A.,

Chief Accountant

ABSTRACTS.

A. Maintenance of Way, Works and Stations.

| Year en | nding aber, 1908 | | Period e 31st Decem | nding ber, 1909 |
|-------------------------|-------------------------|---|------------------------|--------------------|
| \$ | \$ 180,266.98 | . Salaries, Office Expenses and General Superintendence | 8 | \$ 246,992.11 |
| | | Maintenance and Renewal of Permanent Way:- | | |
| 321,659.61 30,175.47 | 351,835.08 | | 408,478.78 | 657,561.02 |
| | | Repairs of Bridges. | | |
| 23,582.92 31,437.58 | 55,020.50 | | 49,586.24 60,214.10 | 109,800.3 |
| s | 66,026.44 653,149.00 | Repairs of Stations and Buildings. | S | 57,559.1 |

B. & C. Locomotive Power and Rolling Stock Repairs.

| 30th Septe | ending mber, 1908 | | | | | | | | | | | Period e 31st Decem | nding ber, 1909 |
|--------------------------|----------------------|---------|-------|---------|----------|------------------------|----------|---------|--------|-------|-----|-------------------------|--------------------|
| \$ | 198 204 71 | | | | | | | | | | - | \$ | S |
| | 126,304.71 | • | Sala | ries, O | ffice Ex | penses and Gene | ral Supe | rintend | dence | ٠ | | | 175,247.50 |
| | | | | | Ru | inning Expen | ses | | | | | | |
| 137,162.64 435,279.07 | | | Wa | ges con | | with working I. | | e Eng | rines | | | 178 017.17 | |
| 36,912.45 61,145.32 | | * | 000 | ter . | * | | | , | * | | | 607,952.37 | |
| 01,140.02 | 010,400.40 | | Oil, | Talloy | v and ot | her Stores | | | * | ٠ | - 1 | 53,326.01 67,988.21 | 007 000 70 |
| 279,730.22 | | Mainter | nance | and | Renew | al of Locom | otives | and | Machir | erv - | _ | | 907,283.76 |
| 163,243.27 | 442,973.49 | * | * | | * | . Wages . | | | | | | 441,052.83 | |
| | | * | | | D | Materials | ٠ | a | | • | | 281,344.03 | 722,396.86 |
| | | | | | | irs and Rene | | | | | * | | ,000.00 |
| 39,941.55 | | | | | C | oaching Vehicle | s: | | | | | | |
| 47,523.70 | 87,465.25 | • | p | | | . Wages . Materials | ٠ | | | • | | 62,951.37 | |
| 67,501.25 | | | | | | Goods Vehicles | | 0 | ۰ | e | - | 63,119.67 | 126,071.04 |
| 63,471.05 | 130,972.30 | | * | * | * | . Wages . | | | | | | 05.000 00 | |
| | 55,237.22 | | | • | 01 | Materials | | • | | • | 0 | 97,993.38 137,026.89 | |
| | 1,513,452.45 | | • | e | Geanii | ng Carriages and | d Oiling | | ۰ | | - | 7,020.00 | |
| | 15,833.41 | | | | Steam | Ferry at Newo | hmone | | | | - | | 66,688.18 |
| \$ _ | 1,529,285.86 | | | | | 21011 | nwang | * | ٠ | ٥ | • | | 2,232,707.56 |
| | | | | | | | | | | | | S | 2,254,806.10 |

D. Traffic Expenses.

| Year ending 30th September, 190 | 18. | | | | Period ending 31st December, 19 |
|--|------|--|--|--|---|
| \$ \$ 89,527.26 183,457.68 58,563.72 39,151.50 192.62 4,275.32 \$ 375,168 | . 10 | | General Superintendence . Wages of Station Staff Wages of Train Staff Lighting and Small Stores Wagon Covers, Ropes, etc. Station Fittings and Furniture | | \$ 111,943.20 248,045.66 73,035.56 57,200.64 5.65 5,177.63 495,40 |

E. General Charges.

| 30th Septemb | | - | | | • | Period 31st Decem | ending ber, 1909 |
|--|----------|---|--|--|---|---|---------------------|
| \$ 246,469.45 58,755.36 49,456.88 39,966.00 10,727.42 118,224.35 150,353.39 33,638.97 2,168.19 24,562.61 216,358,46 \$ 5 | 7,964.16 | | | General Superintendence Accountant's Department Stores Department Medical Department Rents of Buildings and Lands Police Telegraph Department Stationery and Printing Compensation Sundries Difference on Exchange &c. | | \$ 332,208.75 78,206.01 42,526.10 60,353.28 12,947.37 149,658.39 156,458.99 55,887.66 2,858.66 43,724.85 Cr. 202,943.83 | \$ 731,886. |

EARNINGS.

| 30th Septemb | er, 1908. | | | | | Period e 31st Decem | |
|---|-----------|--|--|---------|--|--|-------------|
| \$ 4,898,632.50 5,861,195.14 51,079.92 256,769.56 | 67,677.12 | | Passengers Goods. Military Traffic. Miscellaneous Receipts Chinese Government Traffic. | * * * * | | \$ 6,043,572.71 7,532,638.01 46,920.27 414,605.84 307,464.91 | 4,345,201.7 |

AUDITOR'S CERTIFICATE.

The accounts for the fifteen months ended 31st December, 1909 as stated, contain, in my opinion, a full and true statement of the financial condition of the Railway, and the revenue has, in my judgment, been charged with all expenses which ought to be paid thereout. The interest and redemption of the Loan during the period have been fully met.

Tientsin, 12th March, 1910.

A. F. Algie,

Auditor.

ENGINEER'S CERTIFICATE.

I hereby certify that the Permanent Way, Bridges, Stations and other buildings in connection with the Permanent Way have been maintained in good order.

Tientsin, 31st December, 1909.

A. G. Cox,

Acting Engineer-in-Chief.

LOCOMOTIVE SUPERINTENDENT'S CERTIFICATE.

I hereby certify that the Plant, Engines, Cars, Machinery and Tools have been maintained in good repair.

Tongshan, 31st December, 1909.

F. A. Jamieson,

Locomotive Superintendent.

REPORT ON PERMANENT WAY DEPARTMENT.

INSIDE WALL DIVISION.

| Main line | | • | | • | 284.649 | Miles. |
|---------------------------------|---|---|---|----|---------|--------|
| Sidings, permanent | | | - | _ | 99 659 | |
| Decrease of Main line | | | 9 | | 0.291 | 39 |
| Increase of sidings, permanent. | 9 | | | 4. | 8.180 | - |

Main Line.

107,960 Sleepers have been changed. 867 Crossing ties - " 19.60 lbs. Rails " between Hsukochuang and Shanhaikwan. 9.85 lbs. Rails have been changed between Tientsin and Peking. 70 lbs. Rails have been replaced by 60 lbs. on sidings Tientsin to Hsukochuang. 60 lbs. Rails have been replaced by 85 lbs. on sidings Tientsin to Hsukochuang. 800 fong of Ballast for maintenance has been used. 625 = - new works - n 673 Bridge ties have been renewed. 135.095 fong Rubble for Protective works has been used.

Earthwork executed.

18,534 fongs for New Works. 17,389 " Repairs.

New Buildings, etc.

Chienmen Station platform extended 720 feet. Tongku Station Chienmen Station verandah

Signals erected:-

Up and down signals at Tongshan. Fengtai east signal cabin and 3 starting signals.

Tientsin, west end 12 semaphores. Tongku 21 semaphores and 2 discs.

Two new groins totalling 750 feet run have been made, and training band extended 250 feet at Bridge No. 71.

Earthworks 4,118 fongs. Rubble pitching 840

Waste stone used 2,300 feet run.

Foreshore protection:

Peiho Bank at Hsiku repaired.

Painting executed for maintenance:-

3 Signal posts at Tongshan. Traffic Inspector's quarters Tongshan. Point indicators, Station name boards, Bridge numbers. Mile and gradient stones between Hsukochuang and Tangho. Station Buildings between Hsukochuang and Tangho. Water tank lagging at Kuyeh, Anshan, Peitaiho, and Hsukochuang.

Bridges No. 29, 30 and 114. Overbridge at mile post 30, 91, east of Kaiping, Tangho, station-

master's quarters.

Chienmen to Tientsin Signal levers. Engineers quarters Fengtai, Chienmen quarters. Chienmen station railings, etc. 3 spans of 15 feet girders at Tongku. 7 spans of 15 feet girders at Tengku. Signals, pointstands, bridge numbers, and buildings as required for maintenance.

Water supply works:-

2 Stand pipes erected in Loco Yard Tongshan, and 3" pipe 200 feet long laid 6' 6" below surface to drain off water from pit.

21/2" pipe 211 feet long laid 3 feet below surface to drain off drippings from standpipe.

New tank house at Yangtsun.

Works in progress:

Erecting 2 stand pipes at Tongshan.

Bridge No. 3, Rice Siding at Chienmen quarters, alteration of signals, new standard.

Rainfall:

The average for the year ending 31st December was 15.11".

OUTSIDE WALL DIVISION.

| Main Line | | ٠ | • | | | 0 | | · | | 290.65 | Miles |
|----------------------|-----|-----|------|---|---|---|---|---|---|--------|-------|
| Sidings, permanent | 0 | 9 | | | e | ۰ | 4 | | ٥ | 42.00 | 22 |
| Sidings, temporary | - 4 | | | - | | | | | | 3 42 | .59 |
| Decrease of sidings, | per | mai | ient | ٠ | | | | 0 | | 0.08 | 39 |

Main Line.

96,944 Sleepers have been changed. 781 Crossing timbers have been changed.

Rails changed:

| 30 fee | t N | ew | Standard | 60 lbs. | Cammell' | s, 18 | 98. |
|--------|-------|------|------------|---------------|------------|-------|------|
| 29' 11 | | 27. | 77 | 77 | 27 | | 99. |
| 29' 11 | 53 | 29 | 27 | 27 | | 18 | 98. |
| 30 fee | | 27 | .29 | .39 | | 18 | 99. |
| 30 ree | G | 22 | 29 | 77 | 77 | 19 | 00. |
| | Com | . D | .11 / 0 | 9 | 77 | 10 | no |
| 3,993 | 10118 | 5 15 | allast for | maintena | ance has 1 | been | used |
| 0,000 | 400 | | ties have | 1163332 33200 | A P Co. | 22 | 77 |

New Bridges completed:-

6 feet Timber span at 86.25 converted to concrete rail slab. Bridge 208, one pier rebuilt, 2 spans of 60 feet girders re-erected and additional 60 feet spans added. Bridge 218. Extended one span 60 feet.

Bridge 228. Extended four spans 30 feet.

Bridge 231, 30 feet span replaced by 45 feet span.

Bridge 296A. One new 12 feet span.

Bridge 57. One 30 feet span.

Bridge 58. Three 20 feet spans.

Bridge 59. Twenty 100 feet spans.

New wings and spurs built to many bridges.

Sunk track at 115.25 1,000 feet.

Sunk track at 9.50 extended 1,000 feet.

Sunk track at 39.58 and 40.10 made each 1,000 feet.

10,498 fong Rubble for protective work laid down.

Earthwork executed:—

27.267 fong for new works and West Moukden line. 103.126 " repairs.

New Buildings, etc.

| Shanhaikwan Loco. Inspector's office extension 250 Shanhaikwan Dynama and Oil l | square | feet. |
|--|---------|-------|
| ~ ************************************ | .52 | 22 |
| Similar wall Edectric Herers quartons | -99 | 59 |
| The state of the s | 25 | 99 |
| The state of the s | 22 | 22 |
| Ningyuanchow Engineer's Staff quarters . 1,224 Kaopanetzu Loco gwanten Staff quarters . 2,856 | 22 | 22 |
| Kaopangtzu Loco, quarters | 27 | 99 |
| Kaopangtzu Police quarters | 99 | 99 |
| Kaopangtzu Police quarters Kaopangtzu Station letrine | 59 | 27 |
| Kaopangtzu Station latrine . 200 Shanhaikwan and Chinchou turntables increased 1'6" | 99 | " |
| and Chinchou turntables increased 1'6" | in diam | ot an |

Signals: -

Hsinminfu to Chuliuho and Kaopangtzu to Yingkow stations have all been installed with home and distant up and down signals, which complete the signalling installation at all Outside Wall stations. New point motion and locking bar apparatus also installed at all Outside Wall

Heavy work executed:-

In addition to other works the West Moukden section 17,500 feet of new line was made leading up to the Liao Bridge, improving the alignment and raising the railway. This has been ballasted and is now complete. One station at Chuliuho has been made on this new line, and bridges 57, 58, 59 and 2 sunk tracks.

Foreshore protection:

700 fong of rubble and ballast has been used for repairs to Yingkow Bund.

Wharfage:-

Yingkow wharf bracings repaired.

Painting executed for maintenance: -

Bridges 131, 132, and 179 to 191 and 254 to 263 inclusive.

Shanhaikwan Locomotive Shed.

Water tank, Shihho and Suichunghsien.

Woodwork of all stations Shanhaikwan to Shahouso.

All station rooms, native quarters and sheds whitewashed.

Ferry boat and pontoons painted as usual.

Bainfall and Floods :-

On the hills above Hsinminfu and on the Lienchan to Sarho section the rains were heavy, resulting in floods similar to those of last year, which caused so much damage.

The heavy protection and extensions put in this year and the new spurs to the bridges have proved satisfactorily, and only in a few places will extensions and further provision of water area be required to existing bridges.

At Hsinminfu the Liu river has steadily silted up its bed and broke out twice, on April 4th

and August 2nd.

On April 4th the country north of the railway was flooded and the railway just escaped a washout. Training works were carried out within the railway sphere of action, but nothing was done beyond, and on August 2nd the river broke out again seriously breaching the railway, stopping the traffic for 10 days, and filling up a large section of country with silt, so that the railway formerly on an embankment 4 feet high is now only a little above the river bed, and in some places below it.

The rainfall registered at the different sections was as follows:-

Shanhaikwan 19 inches

Ningyuanchow 25

Kaopangtzu 13 " (for July, August and September only.)

Yingkow

East Moukden Extension.

| Main Line | * | | | | | | e: | 0 | 27,487 | Miles. |
|---|----|-----|-----|------|---|---|----|---|--------|--------|
| Sidings, permanent Increase of sidings | | 0 | | | | * | 0 | | 2,26 | 99 |
| Increase of sidings, | pe | rma | nen | li e | 6 | | 0 | | 1,42 | 77 |

Rails changed:-

25 lengths Japanese 60 lbs. 30 feet

1,808 fong of Ballast for maintenance has been used.

Earthwork executed: -

7,170 fongs for New Works. 11,159 " Repairs.

New Buildings, etc.

| Locomotive Watchi Locomotive Staff q | narte | re | abir | 1 | 0 | * | | 838 | square | feet |
|---|-------|----|------|---|---|---|--|-------|--------|------|
| Moukden Station S | hone | | | | | - | | 2,728 | 25 | 20 |
| Police Office | nobs | | 4 | | | | | 2,389 | | 27 |
| Woighbrid | | 4 | 0, | | | | | 1.893 | 277 | 25 |
| Weighbridge house | | | | | | | | 181 | 27 | 55 |
| | | | | | | | | 101 | 99 | - |

Heavy work executed:—
Transfer platform 600 feet by 46 feet at Moukden between Imperial Railways of North China and South Manchurian Railway lines.

Painting executed for maintenance:—
2 Foreign Staff quarters at Moukden.

Water Supply Works:— One artesian well sunk at Hsinlungtien.

Rainfall and Floods:-

Approximately 25 inches.

During July and August the section between Masanchia and Moukden was constantly flooded, but no damage to embankments resulted.

Shanhaikwan Bridge Works.

The tonnage of work turned out was as follows:-

| | 2110 101111150 01 11011 | |
|------------|---|----------|
| Girders : | | |
| | 4 100' Clear deck spans | Tons 157 |
| | 1 45 | 10 |
| | 2 16' × 4' × 11' pier Moulds | . 1 |
| | 40 60' Standard Caissions | , 41 |
| | 3 sets 51' 6" Overhead Travelling Cranes | » 21 |
| | | 9 02 |
| | | Tons 291 |
| Miscellane | ous:— | |
| | Ironwork to the extent of | Tons 75 |
| | Verandahs and Roof Trusses for Chienmen Station | Tons 414 |
| | Points, Crossings and Locking Bars | Tons 126 |
| Foundry:- | | |
| r oundry . | The Foundry has been fully employed upon Castings for Points and Crossings, Signal posts fittings, wash-out pump castings, heating fans and engines, turntable centres, and miscellaneous castings for Maintenance and Construction, to the extent of | Tons 271 |

GENERAL REPORT OF WORK CARRIED OUT BY LOCOMOTIVE AND CARRIAGE WORKS.

Locomotives.

| General overhaul at Tongshan Workshops | 0 | | | 6 | 0 | 54 |
|---|-----|---|---|---|---|-----|
| Repaired at Kaopangtze | 0 | 6 | 0 | 6 | 0 | 14 |
| New Engines built 19" Moguls | 5 | 0 | | 0 | 0 | 7 |
| New Engines under construction, 4-6-0 ty | vpe | 9 | | 6 | | 3 |
| New Boilers constructed | | | | | | 18 |
| New Boilers under construction | | | | | | 9 |
| New Fireboxes put in | | | | | | 17 |
| Half sides put in | | | • | | 0 | 32 |
| New sets of tubes put in | 9 | • | • | | 0 | 41 |
| Engines fitted with Westinghauss bushe | • | • | • | | , | 41 |
| Engines fitted with Westinghouse brake . | | • | * | | 4 | 6 |
| Engines sold | | | | | | 6 |
| Locomotive Boilers withdrawn from service | | | | | | 8 |
| New tenders built | | | | * | • | 0.4 |
| Now tondors under construction | | | | | | 24 |
| New tenders under construction | 3 | | | | | 2 |

Steam Ferry.

Steam ferry "Liaotung" thoroughly overhauled during winter by Kaopangtze shops.

Coach and Car Repairs.

| | No. of | Cars sent in f | or repairs |
|----------------------|---------|----------------|------------|
| | Freight | Passenger | Brake Vans |
| Àt Tongshan Works . | 1906 | 252 | 44 |
| At Kaopangtze Works. | 819 | 45 | 29 |
| Total | 2725 | 297 | 73 |

Note: At the Running Sheds 14.917 minor repairs were effected, and 41.446 axle boxes were repacked.

Comparative Table of Rolling Stock.

| 1902 | 1903 | 1904 | 1905 | 1906 | 1907 | 1908 | 1909 |
|--------|-------------------------------------|--|---|--|---|--|---|
| 128 | 151 | 167 | 207 | 220 | 236 | 267 | 272 |
| 450 | 534 | 598 | 740 | 792 | 836 | 958 | 964 |
| 2,007 | 2,086 | 2,257 | 2,412 | 2,554 | 2,683 | 2,743 | 2,811 |
| 33,514 | 35,083 | 39,158 | 43,648 | 48,283 | 52,061 | 53,843 | 55,900 |
| 92 | 105 | 105 | 104 | 113 | 117 | 124 | 125 |
| 3,976 | 4,577 | 4,577 | 4,537 | 4,973 | 5,183 | 5,524 | 5,644 |
| | 128 450 2,007 33,514 92 | 128 151 450 534 2,007 2,086 33,514 35,083 92 105 | 128 151 167 450 534 598 2,007 2,086 2,257 33,514 35,083 39,158 92 105 105 | 128 151 167 207 450 534 598 740 2,007 2,086 2,257 2,412 33,514 35,083 39,158 43,648 92 105 105 104 | 128 151 167 207 220 450 534 598 740 792 2,007 2,086 2,257 2,412 2,554 33,514 35,083 39,158 43,648 48,283 92 105 105 104 113 | 128 151 167 207 220 236 450 534 598 740 792 836 2,007 2,086 2,257 2,412 2,554 2,683 33,514 35,083 39,158 43,648 48,283 52,061 92 105 105 104 113 117 | 128 151 167 207 220 236 267 450 534 598 740 792 836 958 2,007 2,086 2,257 2,412 2,554 2,683 2,743 33,514 35,083 39,158 43,648 48,283 52,061 53,843 92 105 105 104 113 117 124 |

Rolling Stock Completed.

| First Class | | | | | | | | | | | |
|-------------|--------------|--------|----|------|----|---|---|-----|---|---|----|
| Third | 37 | | 55 | 77 | 22 | | * | * | | | 1 |
| Brake Vans | | | | | 22 | | | | | | |
| 27 | | | 22 | 22 | 27 | | | | • | ٠ | 2 |
| 30 Tons Hi | gh-sided C | ars | | | • | | - | | | | 50 |
| 30 Ton Oil- | | | | | | | | | | | |
| 10 Ton con | verted into | 12 7 | on | Cars | | | | | | | 64 |
| 20 Ton | 7. 7. | 24 | 22 | 37 | | | | 1.0 | ٠ | | 10 |
| Cars fitted | | | | | | | | | | | |
| Coaches ele | ctrically ed | quippe | d | | | | 6 | | • | | 15 |
| Brake Vans | | | | | | | | | | | |
| Private Car | s lengthene | ed. | | | | 4 | | | | * | 3 |

Second hand Rolling Stock sold to Other Railways.

| 30 Ton Oil tank Cars . | | | 2. Shanghai Nanking line. |
|------------------------|--|--|--|
| Mud Cars | | | 100. Tientsin Pukow, Southern Section. |
| 15 Ton Low-sided Cars | | | 4 Peking Syndicate |

New Rolling Stock built to order of other Railways.

| Pukow Railway, Sou | uthern Section:— | |
|--------------------|-----------------------------------|--|
| | 30 Ton Low-sided Cars | |
| | 30 Ton Flat Cars | |
| Yuehan Railway:- | | |
| | 30 Ton Low-sided Cars | |
| Kalgan Railway:- | | |
| | First class Cars 55 feet frame 6 | |
| | Private Cars | |
| | Second Class Cars 55 feet frame 4 | |
| | Third Class Cars 55 , , , | |
| | Brake Vans 22 " | |
| | 30 Ton High-sided Cars | |
| | 30 Ton Low-sided Cars | |

New Construction now in Progress.

| First Class Drawing Room Cars | 2 0 | | 0 | b | | | 2 |
|---------------------------------|------|---|----|---|----|----|-----|
| Dining Cars | | | | 0 | | 9 | 2 |
| First Class Sleeping Cars | | | 0. | 0 | | В. | 2 |
| Second Class Dining and Kitchen | Cars | | | 0 | | | 2 |
| " Sleeping Cars | | | 0 | | .0 | 0 | 2 |
| " Passenger Cars . | | ٠ | 9. | | | | 2 |
| Heating and Lighting Vans . | | | | | | ٠ | 4 |
| Guard and Baggage Vans | | | | | 9 | | 6 |
| Third Class Passenger Cars | | | | | | | |
| 30 Ton Covered Goods waggons | | | | | | | 146 |
| Lengthening Private Car | | | 8 | 2 | 9. | | 1 |
| | | | | | | | |

Varnishing and Painting.

| Locomotives | ě. | | | | | | | 59 |
|--------------|-----|--|--|--|--|--|--|-----|
| Tenders | | | | | | | | 37 |
| Coaches . | Dr. | | | | | | | 191 |
| Brake Vans | | | | | | | | 29 |
| Freight Cars | | | | | | | | 932 |
| | | | | | | | | |

Foundry.

| Iron Castings | | * | . 6 | | 10 | | | *1 | 755 Tons. |
|----------------|--|---|-----|---|----|--|---|----|-----------|
| Brass Castings | | | | * | | | ÷ | * | 98.4 " |

Average number of employees in Locomotive Department.

| Tongshan V | Vorks | lab | our | ers | | | | | | | 2798 | mei |
|------------|-------|-----|------|-----|----|---|--|---|---|---|------|-----|
| 77 27 | 22 | Cor | itra | cto | rs | • | | ٠ | 9 | | 960 | 29 |
| Kaopangtze | Work | S | | | ٠ | | | | | 9 | 352 | 22 |
| Running Sh | leds. | | | | | | | 0 | | | 1512 | - |

New Machinery Erected.

Locomotive Works:-

10 Screw Cutting Lathes 7" centres 5' 0" bed.
Brass polishing plant.

3 Wheel Lathes, manufactured at Tongshan Works.
Horn block milling machine
Two cylinder horizontal engines
One ton Wall Crane

at

"""
"""

Car Works:—

2 Screw cutting lathes 7" centres 5' 0" bed.

Twist drill grinding machine.

Emery Grinder.

Band Saw.

Painting Machine.

Hot Saw, manufactured at Tongshan Works.

Buildings:

Tongshan Running shed completed. South bay 373' 6" × 51' 9" added to Boiler Shop sheltering machinery and enabling tender and tank work to be carried on under cover. A Furnace and Chimney were built for Car Works, Westinghouse Brake Fitting Shop 140' × 25' built and fitted up. The Electric light installation in works was overhauled, improved and several new lights brought into service.

Traffic Department.

| Train miles run for Revenue Train miles run for Construction and | Ma | inte | ena | nce | 2,451,751. 50,056. |
|---|-----|-------|----------|-------|------------------------------|
| | | | | | 2,501,807. |
| Number of Passengers carried Number of Tons of Freight carried | | | | | 3,603,303. 3,770,945. |
| Passenger Mileage | | | | | 347,111,684. 346,421,799. |
| Total "Passenger Ton" Mileage . | | , | | . (| 393,533,483. |
| Average number of men employed by I including Military Police Force about | rat | fic 1 | Der m | en en | nent) 2,592. |

Telegraph Department.

Length of Wires.

| Tungchou and Tungchou Junction. | | | | 16.65 |
|--|-----|-----|-----|---------|
| Chieffmen and Yingkow (Double wires) | 100 | | | 1043.50 |
| Raopangtze and Fengtien (Double wires) | | | | 214.50 |
| Hsinminfu and Fengtien (Single wire) | * | | | 37.37 |
| richism City and Hsikn. | | | | 4.00 |
| and Tongku (Telephone wire) | | | | 27.00 |
| Fengtai and Lookouchiao | * | | × | 3.85 |
| | | Mil | les | 1346.87 |

Electric Staff Wires.

| W 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 | - | Messages | COLL | POLYTCG | | | | | niles 521.75 206.542 3.314 |
|---|----|------------|-------|----------|----|----|---|---|----------------------------------|
| Average | N | umber of | Emp | loyees | • | | , | 9 | 287 |
| Number | of | Telegraph | Stat | olons . | | | | | 76 |
| Number | of | Recorders | HI U | ise . | * | | | | 118 |
| Number | 01 | Electric S | Stan | stations | | | 4 | | 70 |
| Number | 01 | Electric S | staff | apparatu | IS | 10 | | | 138 |

Accident Report.

Killed and Wounded Schedule.

| | Killed | Seriously injured | Slightly injured |
|---------------|--------|-------------------|------------------|
| Passengers . | 5 | 2 | 1 |
| Employees . | 4 | 6 | 1 |
| Trespassers . | 12 | 8 | 6 |
| Total . | 21 | 16 | 8 |

